

## SureTest® Circuit Analyzers

- Measures voltage drop under load\*
  - Hot and neutral conductor impedances
  - Estimates Load on Line (ELL) up to 15A
  - Tests GFCIs and EPDs for proper operation
  - Super-bright display
  - High accuracies
  - True RMS
  - Line voltage
  - Peak voltage
  - Frequency
  - Ground to neutral voltage
  - Ground impedance
  - Identifies proper wiring in 3-wire receptacles
  - Identifies false (bootleg) grounds
  - Conducts testing without disturbing sensitive loads
  - Verifies isolated grounds (with 61-176 adapter)
  - 2-year warranty
- \*12A, 15A, 20A load tests

61-165



Description	Cat. No.
SureTest® Circuit Analyzer - Tests AFCIs wiring, tests for shared neutrals	<b>61-165</b>
SureTest® Circuit Analyzer	<b>61-164</b>

### Accessories

Includes	
Carrying Case	<b>61-179</b>
1' Extension Cord	<b>61-182</b>
Optional	
Ground Continuity Adapter	<b>61-175</b>
Isolated Ground Adapter	<b>61-176</b>
Alligator Clip Adapter	<b>61-183</b>

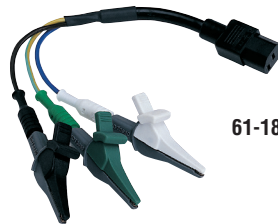
### Specifications

	Range & Resolution	Accuracy
AC Voltage	85.0 - 265.0 VAC	1.0%
Frequency	45.0 - 65.0 Hz	1.0%
Impedance	0.00 - 1.99 Ω	5.0%
Ground-Neutral Voltage	0.0 - 24.0 VAC	2.0%
% Voltage Drop 12A, 15A, 20A load tests	0.1% - 50.0%	5.0%
GFCI Test Current/Time	6.0 - 9.0 mA 0.0 - 6500 mS	2.0%

CIRCUIT ANALYZERS



61-183



61-175



61-176



61-182



### SureTest® Circuit Analyzer Functions

#### Voltage Drop

- NEC recommends no more than 5% voltage drop
- Higher voltage drop leads to heat buildup and performance issues
- <108V is a poor level for voltage load



#### Line Voltage

- Specification is 120VAC +/-10% (108 to 132 VAC)
- True RMS ensures accuracy in harmonic environments



#### Ground-to-neutral Voltage

- Good circuit has 2VAC or less
- Higher reading indicates loaded circuit, harmonic distortion or shared neutral



#### Ground Impedance

- Ground impedance should be 1Ω or less (0.25Ω or less for sensitive equipment to run properly)



#### GFCI

- Applies a 6-9mA fault current and measures the trip time
- Applies a 30mA fault current to check for equipment protection



Troubleshoots branch circuit problems with a variety of tests at the receptacle.



AFCI testing with alligator clips on an installed device.